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UNITED STATES DEPARTMENT OF AGRICULTURE

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OFFICE OF INFORMATION

HOUSEKEEPERS' CHAT Thursday, August 19, 193'

(FOR BROADCAST USE ONLY)

Subject: "SAFETY FIRST WITH ELECTRICITY." Information from the Bureau of Home Economics, the Bureau of Agricultural Engineering, and the Extension Service, U. S. Department of Agriculture.

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We have talked much recently of the advantages of having electricity to serve us in our homes. We have discussed plans for the installation of current and the selection of electrical equipment. And all the time some of my listeners have had a question in the back of their minds. It's a very natural question for those who have lived far from cities, where electric lights, electric irons, refrigerators, fans, washing machines and all the other electric conveniences are more or less taken for granted.

"Is electricity safe?" is the question troubling these families who would like the convenience it brings. For various reasons they wonder whether there is any risk involved in using it.

On the other hand, there are people who take electricity as so much of a commonplace that they do not hesitate to tamper with appliances. They install extensions of the wiring, according to their own ideas. Or they use electric appliances in places where anyone who really understands electricity would know there was a risk.

Engineers of the U. S. Department of Agriculture agree with the International Association of Electrical Inspectors, and say definitely that electricity is perfectly safe when properly installed and used. Certain rules should be observed to keep it safe at all times. The hazards are just what some of the timid souls fear: Physical shock or fire.

The first fundamental principle in the safe installation of electricity in the home is to use materials suitable for the job. This may mean at the time the house is built, or at some later time. Use only the proper kinds and sizes of wiring and conduits, in accordance with the National Electrical Code. This code has been accepted as the basis of electrical ordinances in many cities and towns. These ordinances require that wiring installation shall be inspected by a qualified electrician before the current is turned on. Changes and additions of all kinds must also be inspected. The handy man who thinks he knows how to run an extra line around the baseboard or molding had better be careful.

The next rule is simply to keep all electric wiring and equipment in good order. Many of the fires laid at the door of electricity should be chalked up against plain carelessness. The electric wires in the walls and the cords that connect the current to any appliances must be in first rate condition all the time It is a sign of trouble when sockets hiss or lamps flutter, when plugs are loose in wall outlets, when wall switches fail to function, when the insulation on wires

is injured, when it is possible to get a shock from an appliance, or when an appliance fails to operate or causes a blown fuse. Before such symptoms can grow into a hazard, it is advisable to have the trouble corrected.

Nearly everyone has received slight shocks from electrical equipment at some time, usually without any ill effects. Under some circumstances, however, shocks can be dangerous, depending on the amount of current. When hands are wet the contact is likely to be more direct and the shock more severe. So just for safety's sake it is a good rule to dry the hands before handling appliances connected to the circuit, and as far as possible, to keep electric appliances away from areas where water is used. Of course there are electric razors, heaters, and curling irons, often used in bath-rooms; cooking and mixing appliances used in the kitchen; the electric iron used on damp articles, and the washing machine, filled with water. These appliances are safe when well-made and properly insulated, but it is wise to use them as far as possible from the place where water enters, and to dry the hands before touching any of them.

Flexible cords get hard service. They must stand a great deal of flexing, twisting, bending, and kinking without breaking down. All cords ultimately wear out. Those which are carefully made of durable materials will give longer and safer service than those of inferior construction. Even the best cords, approved by the Underwriters' Laboratories, are not expensive, and it pays to get cords of high quality. It is especially important to watch a cord at its point of most frequent bending, usually where it enters the appliance. Those who understand electric appliances often use bicycle tape for temporary repairs on worn cords. But if a cord develops breaks, it is better for the inexperienced user to replace it.

The fuse is the safety valve of the electrical system. It consists of a small link of soft metal which melts when too much current passes through it. If a short circuit occurs anywhere in the wiring system, an excessive current flows through the wires and through the fuse, and if the fuse operates properly, it will melt, cutting off the current before any harm can be done. Good fuses are very important, therefore, and should never be tampered with.

Besides protecting from short circuits, fuses show when there is an overload, as when too many appliances are connected to one circuit. Inexperienced users of electricity have been known to put a hot plate, an electric heater and a washing machine all on one circuit. Any one of these appliances would be load enough for one connection. In fact, many ordinances require that the washing machine should always be run on a circuit separate from all other electric uses in the house. When a fuse is blown, always find the trouble and remedy it before using the appliance that caused it to blow out. All appliances should be removed from the circuit when changing fuses and it is a wise precaution to open the main switch, too.

I've only time for a few other safety suggestions: Disconnect appliances, when through using them. This applies especially to the electric iron, when left even temporarily. Don't connect an iron to a lamp socket. Use a convenience outlet in the wall. Don't pull the cord to remove the plug; take hold of the plug itself. Only rubber-sheathed cords of good quality should be used on the washing machine. Any cord attached to any appliance must be checked frequently for possible breaks. Where washing machines would otherwise be used on an earth floor, a raised wooden platform large enough to take both the machine and the operator, and a protective grounding wire, constitute a double safeguard.

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